

Attorney Docket No. 14770US01

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In The Application Of:	)
Darwin Rambo	CERTIFICATE OF MAILING
Serial No.: 10/697,670	) I hereby certify that this correspondence is being deposited with the United States
Filed: October 29, 2003	<ul> <li>Postal Service as first class mail in an</li> <li>envelope addressed to: Mail Stop RCE,</li> </ul>
For: HIGH QUALITY AUDIO	) Commissioner for Patents, P.O. Box 1450,
CONFERENCING WITH	) Alexandria, VA 22313-1450 on:
ADAPTIVE BEAMFORMING	) Date: November 9, 2006
Examiner: TIEU, BENNY QUOC	) By: (C Σ - τ Σ
Group Art Unit: 2614	Kevin E. Borg
	Registration No. 51,486
Confirmation No.: 8396	,

# TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

Mail Stop RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed are the following:

- \* A completed PTO form PTO/SB/08b in duplicate; and
- \* A copy of the non-patent literature referenced herein is enclosed. The cited references were not previously cited by or submitted to the U.S. Patent Office in U.S. Application No. 10/697,670 and are listed on the enclosed form PTO/SB/08b.



#### FEE DETERMINATION

\* No fee is believed to be due because:

The applicant(s) believe(s) that this statement and enclosures are being filed with the above-identified application.

#### **FEE PAYMENT**

The following arrangements have been made to pay the fees calculated above:

\* No fee is believed to be due.

The Commissioner is hereby authorized to charge any additional fees, which are presently required, or credit any overpayment, to Deposit Account No. 13-0017.

### REQUEST FOR CONSIDERATION

This paper and enclosures are believed to be entitled to consideration under 37 C.F.R. § 1.97, based on the facts stated above.

This submission is in no way intended as an admission that the cited references constitute prior art under any subsection of 35 U.S.C. § 102 or §103. Applicant expressly retains the right to argue that any of the cited references are not indeed prior art or to take any actions necessary to remove any of the cited references from the available prior art.

The Examiner is requested to initial both copies of the enclosed PTO form PTO/SB/08(b) and return one copy to the applicants to indicate consideration of the cited references.

Respectfully submitted,

Date: November 9, 2006

Kevin E. Borg Reg. No. 51,486

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PTO/SB/08b(08-03) NOV 1 3 2006

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FRARENS Substitute for form 1449B/PTO Complete if Known Application Number 10/697,670 INFORMATION DISCLOSURE Filing Date October 29, 2003 STATEMENT BY APPLICANT First Named Inventor Darwin Rambo 2614 Art Unit (Use as many sheets as necessary) Examiner Name TIEU, BENNY QUOC Attorney Docket Number 14770US01 of 1 Sheet

Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		THOMAS MAGESACHER AND TOMAS NORDSTROM, "Splitting The Least-Mean-Square Algorithm", Norsig-2000, 5 <sup>th</sup> Nordic Signal Processing Symposium, Oct. 4-Oct. 7, 2002, available at <a href="http://www.norsig.no/norsig2002/Proceedings/papers/cr1100.pdf">http://www.norsig.no/norsig2002/Proceedings/papers/cr1100.pdf</a> .	
		BERNARD WIDROW, ROBERT C. GOODLIN ET AL., "Adaptive Noise Cancelling: Principles and Applications Using Normalized Least Mean Square (NLMS) Algorithm", Proceedings of the IEEE, Vol. 63, pp. 1692-1716, Dec. 1975.	
		"Acoustic Echo Cancellers: The Algorithm", May 15, 2003, available as of 11/9/06 at <a href="http://www.esat.kuleuven.ac.be/~rombouts/demo/aec.html">http://www.esat.kuleuven.ac.be/~rombouts/demo/aec.html</a> , pp. 1-13.	
		"Demo Beamforming", Koen Eneman, available as of May 15, 2003 at <a href="http://www.esat.kuleuven.ac.be/~eneman/demo_beam/demo_beam.html">http://www.esat.kuleuven.ac.be/~eneman/demo_beam/demo_beam.html</a> , pp. 1-9.	
		MAN MOHAN SONDHI, "Adaptive Echo Cancellation For Voice Signals", Center For Advanced Information Processing (CAIP), Rutgers University, Piscataway, NJ, presented at CAIP 12/03/2002, pp. 1-40.	
		M. BRANDSTEIN and D. WARD (EDS.), "Microphone Arrays: Signal Processing Techniques and Applications", Springer-Verlag, New York 2001.	
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Examiner	Date	
Signature	Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.